

WRIGHT STATE
UNIVERSITY



Universal Prevention in Schools

Dr. Jason Fruth – Wright State University – www.wrightofer.com

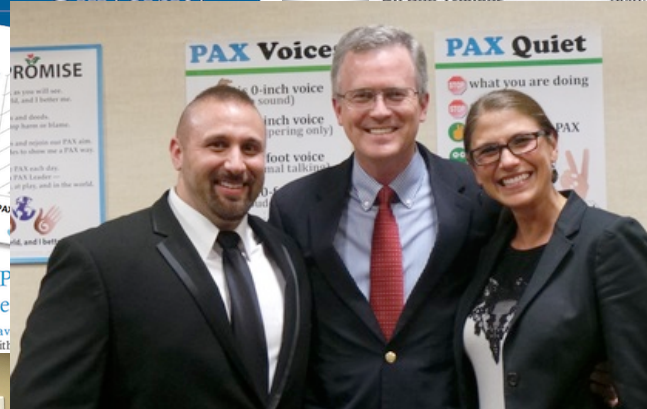


Jason Fruth: The Tootle trainer

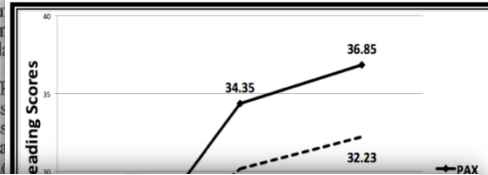
By Bob Trueman



What does P
do for future
The PAX Good Behav
teaching strategies wit



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- The PAX Good Behavior Game®
- A set of research-based strategies employed in the classroom that teach self-regulation
- This self-regulation creates
 - More nurturing environments
 - Increased academic performance
 - Improved long-term outcomes

Evidence-Based Kernels



**Kernels to CUE attention,
regulation, and on-task
behaviors**

Evidence-Based Kernels



Kernels to REINFORCE task completion, regulation, and pro-social behaviors

Evidence-Based Kernels



PAX Hands

PAX Hands
help.

PAX Hands
never hurt.



PRAISE PAX FEET HERE

"Thank you for waiting...That's PAX!"
"I appreciate not pushing. Thanks for the PAX."
"You are showing respectful, responsible and safe
feet. Great PAX!"

Copyright © 2003-2010, PAXI Institute. All rights reserved. May be reproduced by teachers with valid, purchased
copy of the PAXI Good Behavior Game. Questions? Call 1-800-279-4770, M-F, 9-5 pm Arizona Time. info@paxi.org

PAX Voices

 is 0-inch voice
(no sound)

 is 3-inch voice
(whispering only)

 is 3-foot voice
(normal talking)

 is 10-foot voice
(louder talking)



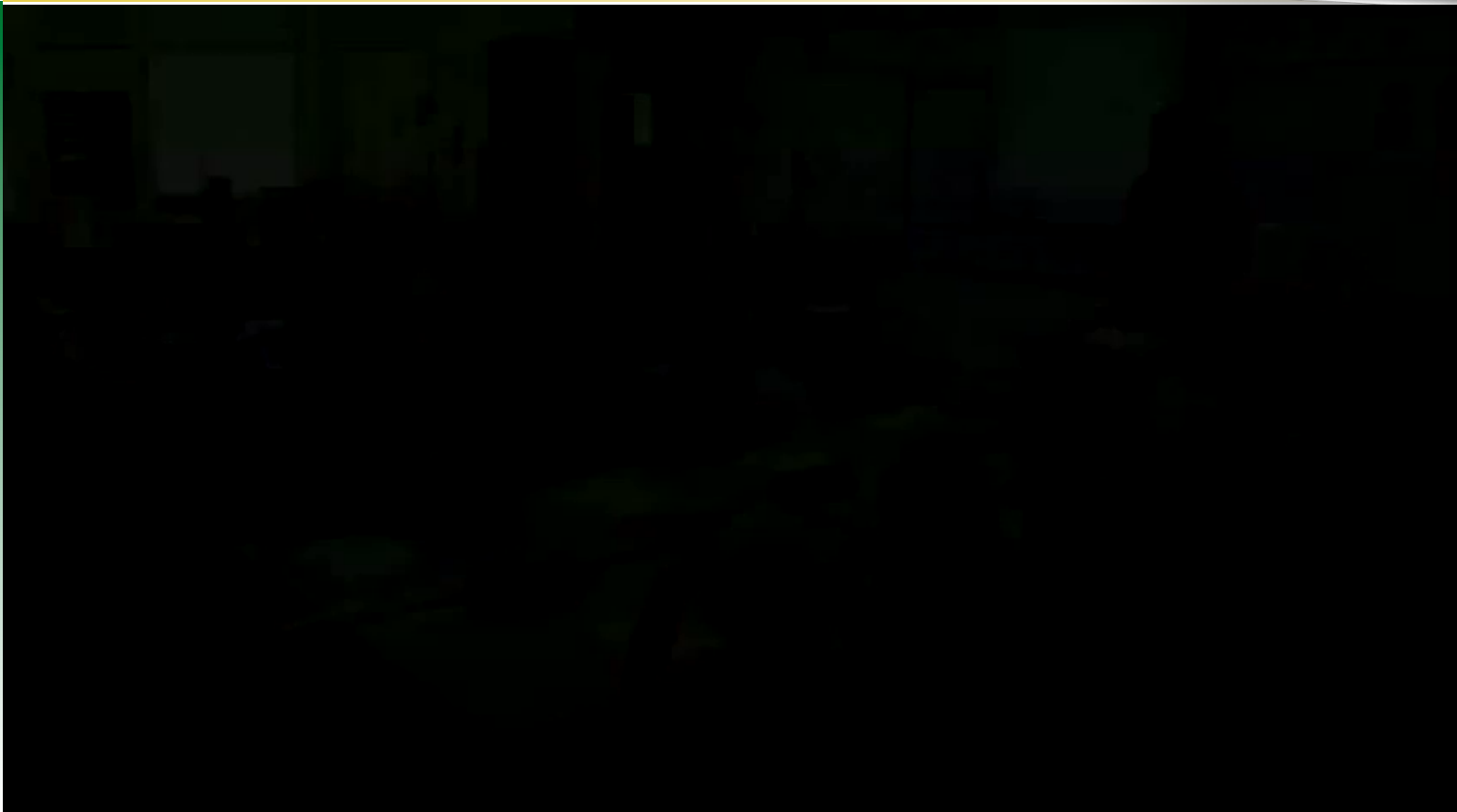
Kernels to create shared
RELATIONAL FRAMES and
understanding

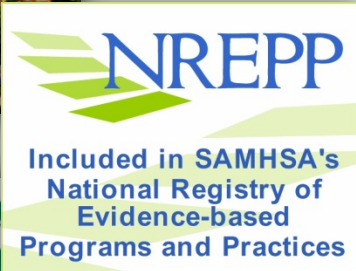
The PAX Game



A Behavioral Vaccine

The PAX Game



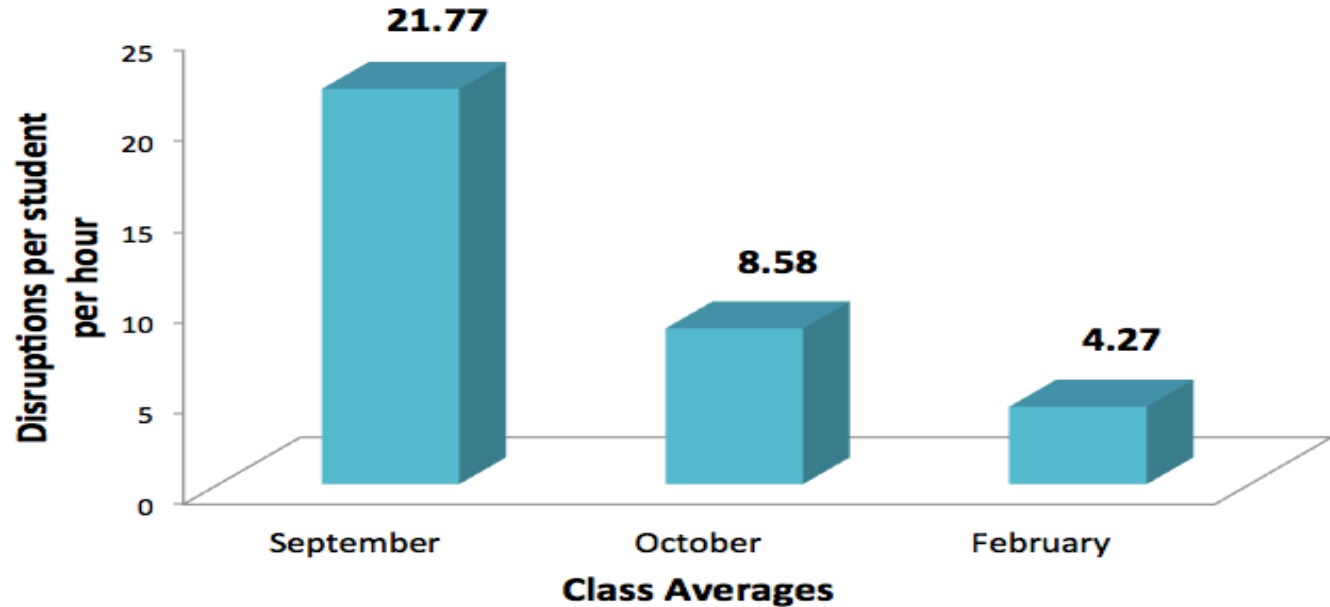


- The Good Behavior Game has undergone multiple randomized control trials with over 25 years of longitudinal research from Johns Hopkins University
- Recommended in:
- National Registry of Evidence-based Programs and Practices
- The 2009 Institute of Medicine Report
- Washington State Institute for Public Policy Report

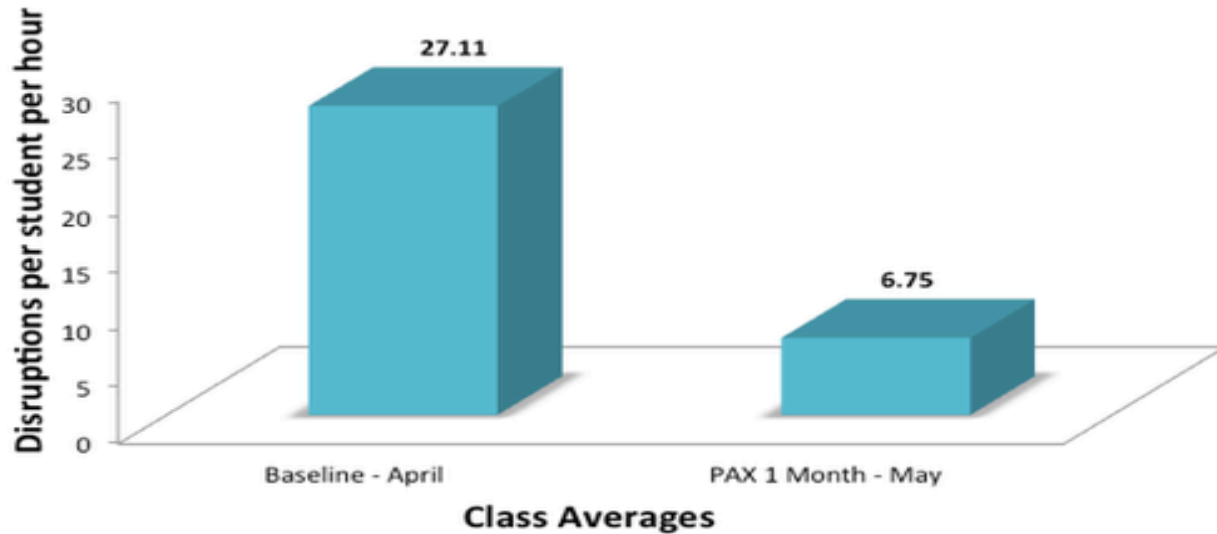


- 🌟 *PAX Classes typically show:*
- 🌟 60-90 additional minutes of instruction
- 🌟 75% drop in disruptions
- 🌟 60% drop in discipline referrals
- 🌟 20-30% drop in identification for special ed.

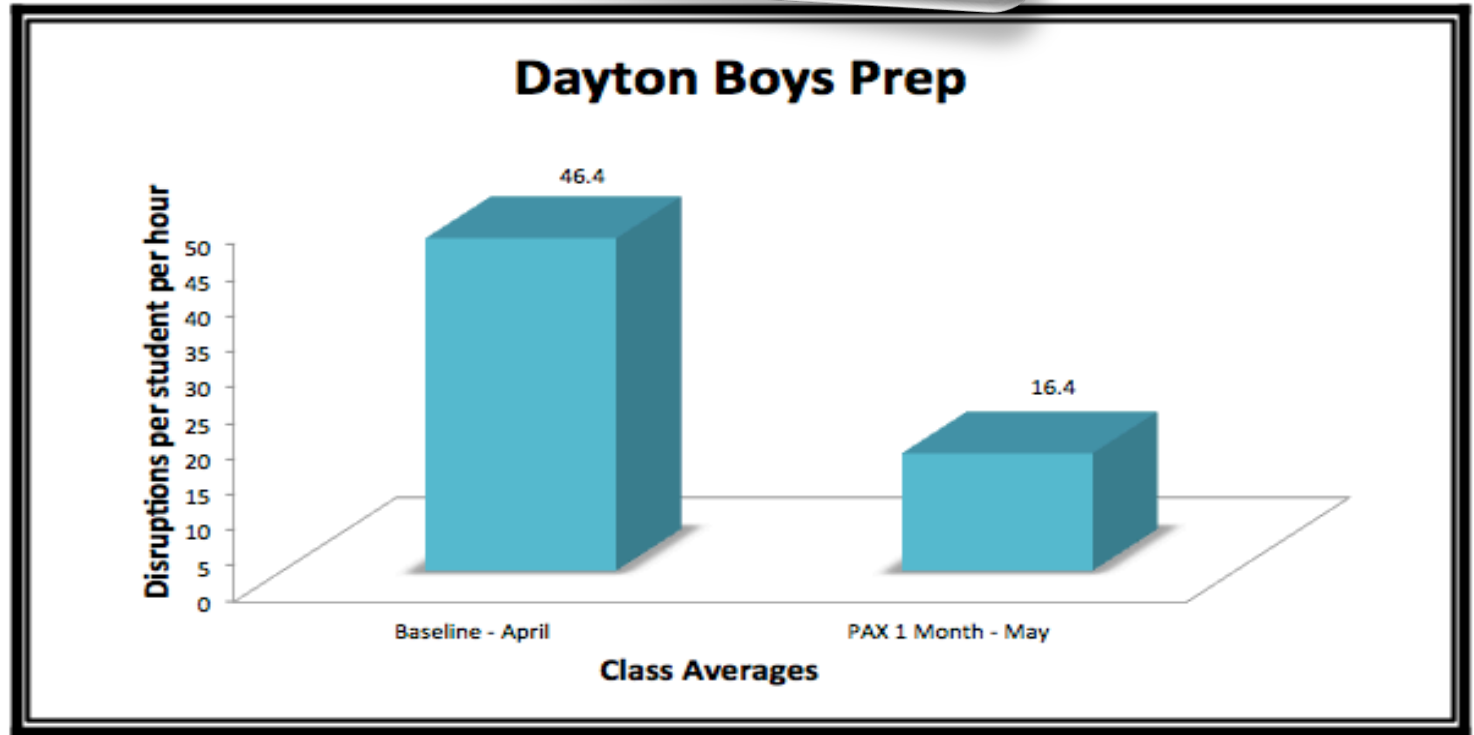
Arrowood Elementary



Eastmont Elementary

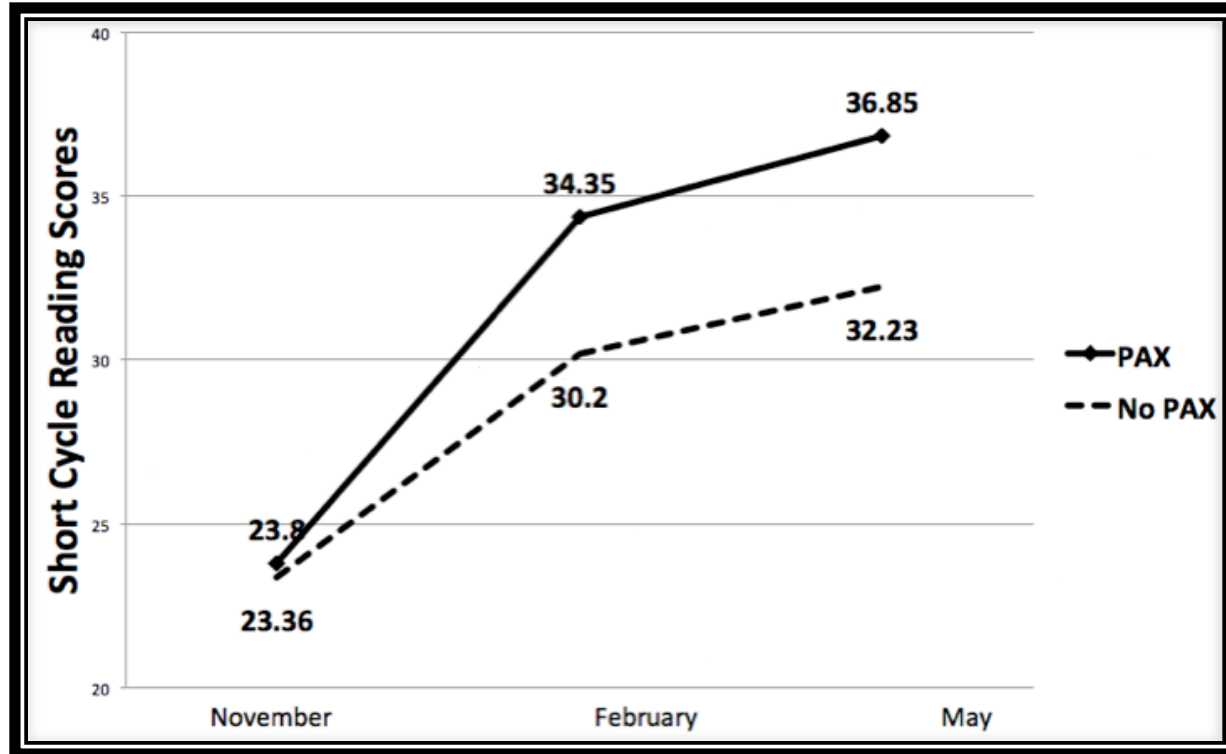


Total Disruptions per student per hour for Eastmont Elementary during the 2012-2013 school year



Total disruptions per student per hour for Dayton Boys Prep during the 2012-2013 school year

Saville Elementary 2012-2013



Background

This study examined the impact of a classroom-based universal preventive intervention (PAX Good Behavior Game) on proximal and distal outcomes of 4th graders. This intervention was introduced at the beginning of the school year, and behavioral (disruptions per student per hour) and academic (short cycle reading performance) outcomes were tracked throughout the year as well as compared to control classrooms.

Efficacy Trials

The PAX Good Behavior Game has undergone multiple randomized control trials from Johns Hopkins University. These trials found PAX classrooms to have:

- 60-90 minutes of additional instruction
- 75% fewer disruptions
- 60% fewer discipline referrals
- 20-30% drop in identification for special education services

When these PAX students were tracked to age 21, they found that PAX students had:

- 50% less drug dependence
- 68% less tobacco use
- 35% less alcohol dependence
- 32% less criminal activity



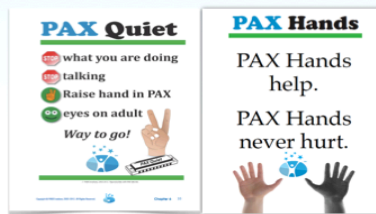
Methods

4th grade students receiving PAX GBG had their proximal outcomes (disruptions per student per hour) tracked as a part of a within group repeated measures design and had their distal outcomes (short cycle reading performance) tracked and compared to the control group of 4th graders receiving the business-as-usual classroom instruction.

The PAX Good Behavior Game involves teaching self-regulation through the administration of 5 evidence-based kernels, 4 research-based cues, and the soft team competition of the Good Behavior Game.

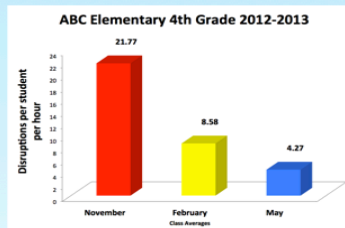


By using PAX to adjust the antecedents, reinforcement, and relational frames in the classroom during normal academic activities, students begin to show drastic improvements in behavior and performance.

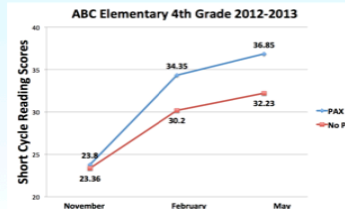


Results

4th grade students receiving the PAX Good Behavior Game demonstrated a significant decrease in disruptive behavior throughout the year.



Students receiving the PAX Good Behavior Game also demonstrated substantially higher reading scores than students receiving normal classroom instruction.



Conclusion

This effectiveness trial yielded similar results to the efficacy trials carried out in ideal clinical conditions over the past 25 years. This indicates that teachers can successfully carry out universal prevention interventions in the classroom and see an improvement in academic and behavioral outcomes.

Discussion

The PAX Good Behavior Game appears in the Substance Abuse and Mental Health Services Administration's National Registry of Evidence-based Programs and Practices. It is also recommended by name in the 2009 Institute of Medicine Report. When teachers use the PAX Good Behavior Game in the classroom, they are not only increasing the peace, health, happiness, and productivity of their students. They are teaching self-regulation and not merely administering classroom management. This self-regulation lasts a lifetime. In fact, a teacher who uses the PAX Good Behavior Game throughout a 30-year career will likely have:

- 66 more girls graduate from high school
- 49 more boys graduate from college
- 7 fewer boys convicted of violent crimes
- 72 fewer students develop drug addictions
- 49 fewer students using tobacco
- 27 fewer students using alcohol

The financial impact of this one teacher using the PAX Good Behavior Game on society amounts to over \$9,700,000 in savings to local, state, and national communities and governments.

PAX Training at WSU



 PAX Training for In-service Teachers



Teachers' Sense of Efficacy

 Proven predictor for:

 Job Satisfaction

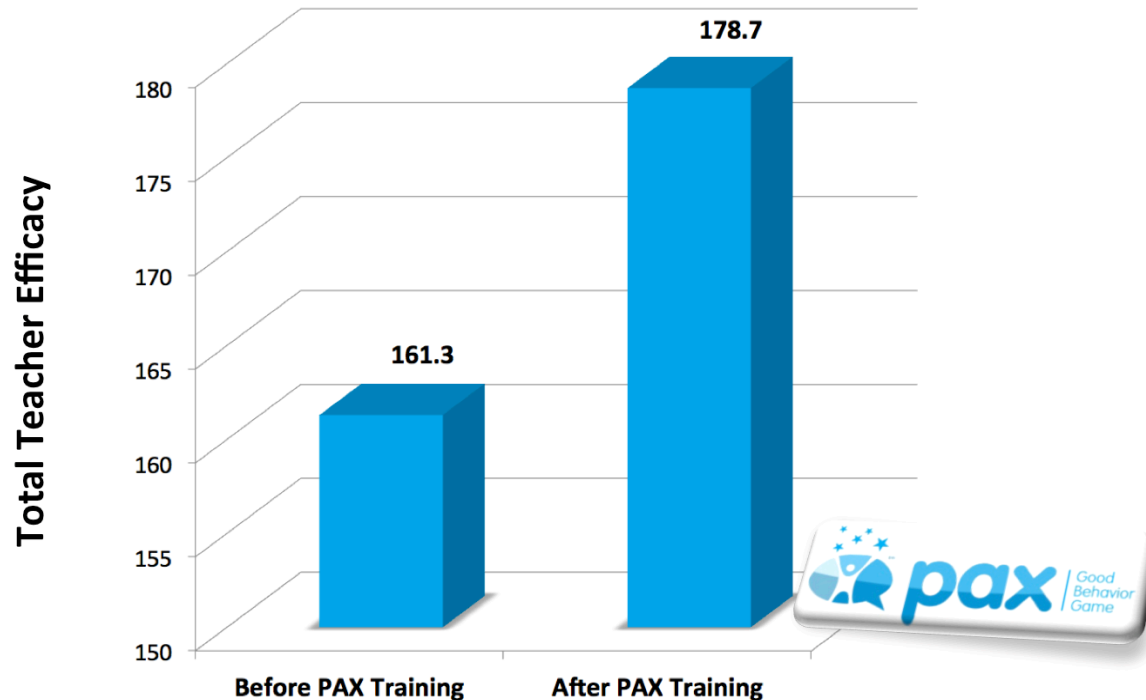
 Teacher Performance


 Turnover Rate

PAX Training at WSU



Pre/Post Mean Scores in Teacher Efficacy




 Statistically significant increase in teacher efficacy for In-service teachers

**Statistically Significant Growth After Paired Samples t-Test*



- 🌟 PAX Pre-service course now offered at Wright State University
- 🌟 This course includes in-class presentations, online modules, and field observations in PAX Schools



 Good Behavior Game

Tip:
Balance Teams
Do not be too quick to put students on their own team
Rotate teams
Revisit PAX Vision

Struggles with Game:

Game Use:
How could I make sure I play 3 times _____
Where all can we play _____

How Can I Get High Spies involved:

New Ideas

ECE 340d
Module 2 Quiz

- Why are most behavioral kernels not widely publicized?
A. Behavioral kernels lack scientific evidence
B. They are difficult for companies to profit from
C. Most are already in full use
D. Most oppose common sense
- What are some of the personal impacts on us of others not recognizing our PAX-like behaviors?
A. No longer recognizing when others are in need
B. Increasing hostile or selfish behaviors
C. Reduced collaborative behaviors
D. All of these are potential impacts
- What does it take to record and thus, begin to reduce **spikes** in the classroom?
A. Pencil and paper
B. State teaching license
C. Ph.D. in behavioral science
D. Firm grasp of Applied Behavior Analysis
- What is the importance of developing a classroom vision?
A. to ensure everyone knows the class rules
B. to convey values to the students
C. to promote student ownership of their environment
D. to establish a posted discipline plan
- What policy helped decrease liquor sales to minors in Wyoming by 40%?
A. Reward and reminder
B. Three strikes
C. Liquor license revocation
D. I.D. All
- Matching law, Extinction, Discriminative stimuli, Variable interval, and ratio schedules are examples of the psychological basis for:
A. Good behavior
B. Compliance
C. Behavior kernels
D. Positive reinforcement
- Which of the following is NOT a criterion for a behavioral vaccine?
A. inoculates against morbidity
B. low cost



In-class instruction features direct instruction and modeling of behavioral kernels



Candidates also have organic practice and application of behaviorism principles through video and cooperative work

PAX Instruction at WSU



The Impact of the Good Behavior Game, a Universal Classroom-Based Preventive Intervention in First and Second Grades, on High-Risk Sexual Behaviors and Drug Abuse and Dependence Disorders into Young Adulthood

Sheppard G. Kellam · Wei Wang ·
Amelia C. L. Mackenzie · C. Hendricks Brown ·
Danielle C. Ompad · Flora Or · Nicholas S. Ialongo ·
Jeanne M. Poduska · Amy Windham

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Abstract The Good Behavior Game (GBG), a method of teacher classroom behavior management, was tested in first- and second-grade classrooms in 19 Baltimore City Public Schools beginning in the 1985–1986 school year. The intervention was directed at the classroom as a whole to socialize children to the student role and reduce aggressive, disruptive behaviors, confirmed antecedents of a profile of externalizing problem outcomes. This article reports on the GBG impact on the courses and interrelationships among aggressive, disruptive behavior through middle school, risky sexual behavior, and drug abuse and dependence disorders

Electronic supplementary material The online version of this article (doi:10.1007/s11212-012-9296-2) contains supplementary material, which is available to authorized users.

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through ages 19–21. In five poor to lower-middle class, mainly African American urban areas, classrooms within matched schools were assigned randomly to either the GBG intervention or the control condition. Balanced assignment of children to classrooms was made, and teachers were randomly assigned to intervention or control. Analyses involved multilevel growth mixture modeling. By young adulthood, significant GBG impact was found in terms of reduced high-risk sexual behaviors and drug abuse and dependence disorders among males who in first grade and through middle school were more aggressive, disruptive. A

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J. M. Poduska · A. Windham

Subject	Author	Date
Spleem Counting Discussion	Jodi Grillot	Jan 21, 2014 8:19 PM
Spleem Counting Discussion	Raedah Alofi	Jan 21, 2014 8:07 PM
Spleem Counting Discussion	Morgan Detty	Jan 21, 2014 8:07 PM
Spleems_Baker	Samantha Baker	Jan 21, 2014 8:05 PM
Spleem Counting Discussion	Manal Allogmani	Jan 21, 2014 7:52 PM
Spleem Counting Discussion	Ashley Noble	Jan 21, 2014 7:34 PM
Re: Spleem Counting Discussion	Morgan Detty	Jan 21, 2014 8:11 PM



Online modules provide for enrichment through reflection and exchange of ideas in online discussions among candidates



Online modules also contain weekly research summaries and quizzes



- Field experiences allow candidates to practice PAX Strategies
- Research Projects allow candidates to align PAX Principles with state and local initiatives

PAX in ECE at WSU

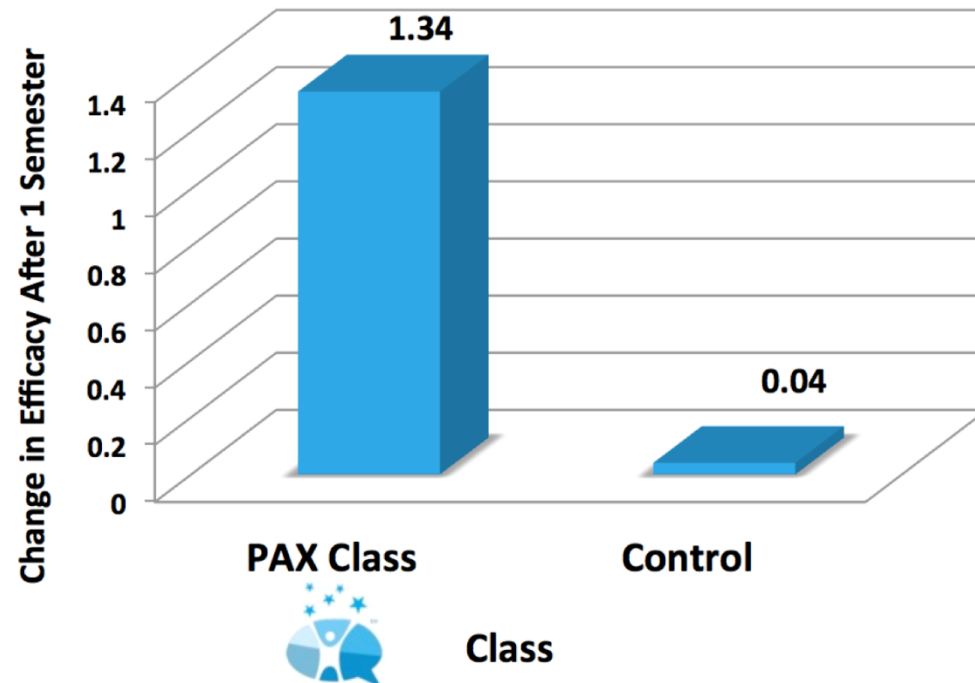


 PAX Instruction for Early Childhood Education Candidates

PAX in ECE at WSU



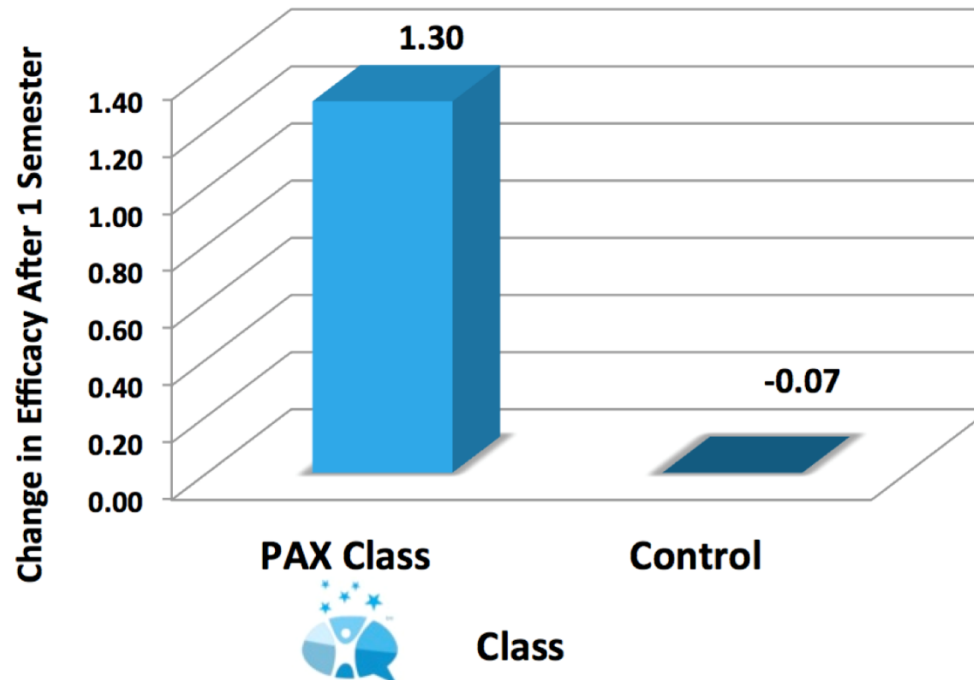
Increase in Instructional Strategies



PAX in ECE at WSU



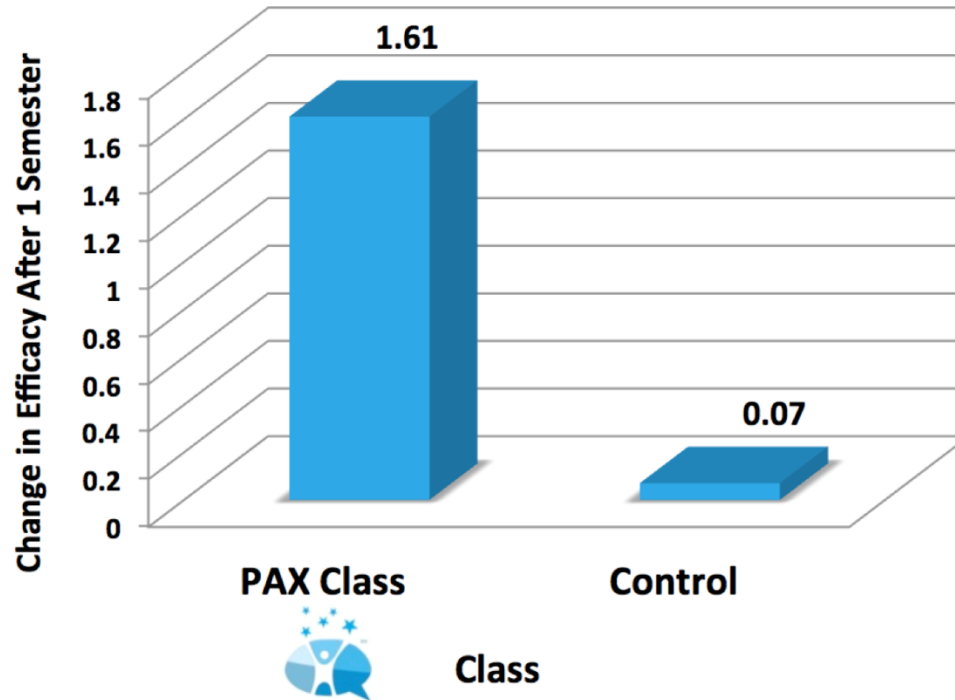
Increase in Student Engagement



PAX in ECE at WSU



Increase in Classroom Management



The Impact of a Universal Preventive Intervention on Teacher Candidates

Dr. Jason Fruth & Dr. Mary Huber
Journal of Education and Human Development

Background

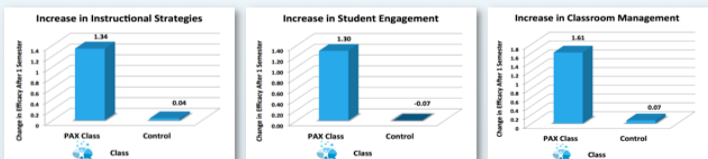
This study examined the impact of a universal preventive intervention (the PAX Good Behavior Game) on the sense of efficacy of pre-service teacher candidates. This classroom-based universal preventive intervention is listed in the National Registry of Evidence-based Programs and Practices and is recommended by the 2009 Institute of Medicine Report. It has shown to proximally decrease disruptive behaviors, stabilize and decrease both depressive and aggressive symptoms, while increasing instructional time and on-task behavior. It has shown to longitudinally increase graduation rates and college entrance rates, while decreasing drug dependence, tobacco use, alcohol dependence, risky sexual behavior, and suicide ideation. However, as this intervention had only been instructed as a professional development workshop for practicing teachers, little was known about the impact of including universal prevention training as a part of a pre-service teacher education program on the sense of efficacy of pre-service teacher candidates.



Methods

This randomized control study examined the impact of the exclusive Wright State University PAX Pre-service Teacher Training Course on the sense of efficacy of early childhood pre-service teacher candidates. Treatment students received a semester-long course in the PAX Good Behavior Game in addition to their pre-service training, while control students received the normal early childhood program. The Teachers' Sense of Efficacy Scale was used to measure the growth in efficacy of the two groups.

Results



Paired t-tests showed that PAX candidates demonstrated a greater sense of efficacy after receiving PAX instruction. Independent t-tests showed PAX students to have a greater sense of efficacy than the control students in the areas of Instructional Strategies, Student Engagement, and Classroom Management.

Conclusions

Teachers' sense of efficacy has shown to predict teacher performance, teacher retention, and student performance. Thus, increasing this efficacy with a proven universal preventive intervention can have tremendous impacts on teachers and students. In fact, this student/teacher improvement lends itself to a transactional model in which teacher performance and behavior not only influences but is also influenced by student performance and behavior. This constant dynamic exchange and improvement can explain the tremendous longitudinal impacts that the PAX Good Behavior Game has on children.



The ONLY accredited PAX Pre-Service Teacher Training in the United States is at Wright State University

PAX in MCE at WSU



SINCE
2015

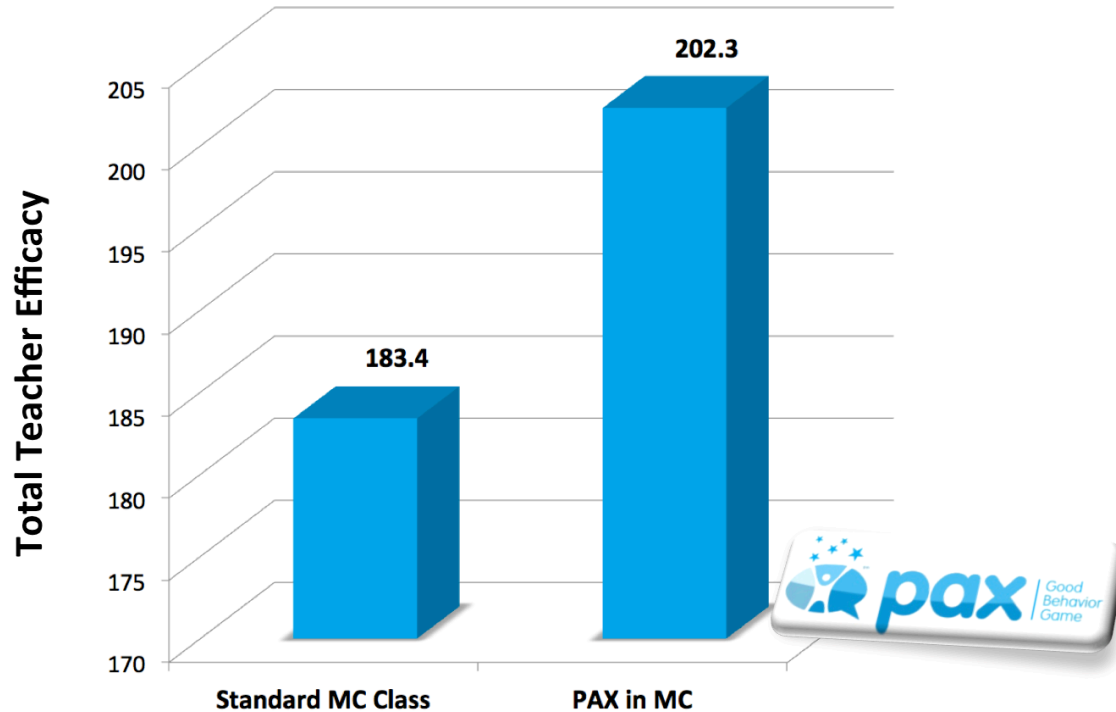



PAX Instruction for Middle Childhood Education Candidates

PAX in MCE at WSU



Standard vs. PAX Class in Middle Childhood



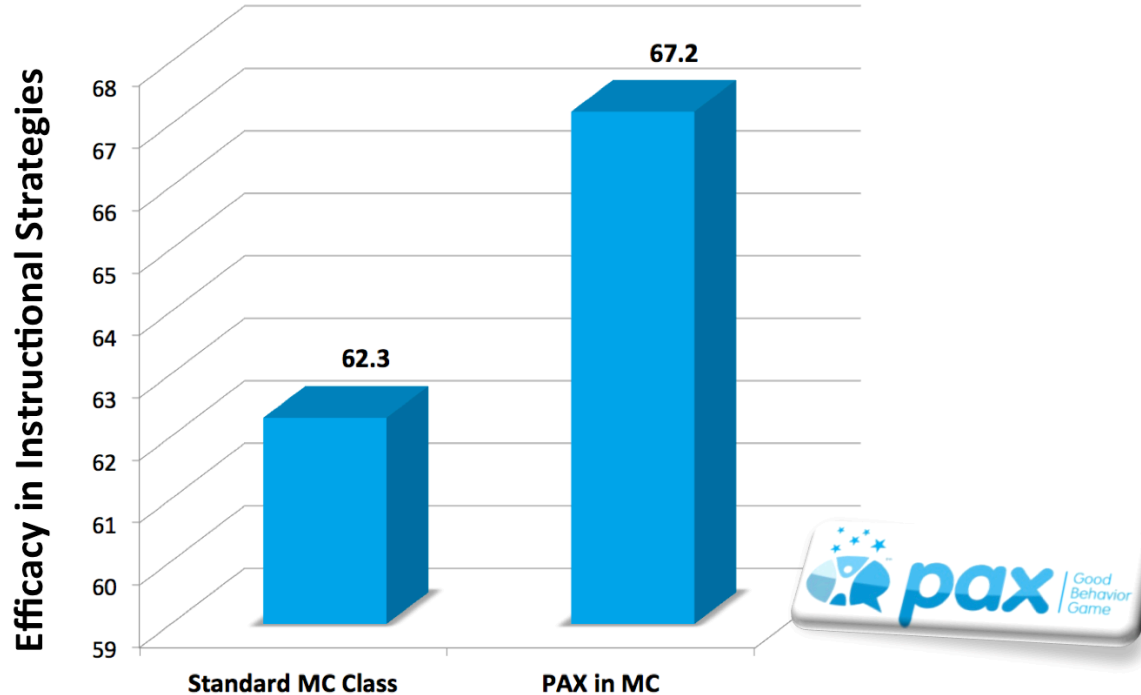
 Statistically significant increase over control in overall teacher efficacy

**Statistically Significant Growth After Independent Samples t-Test*

PAX in MCE at WSU



Standard vs. PAX Class in Middle Childhood



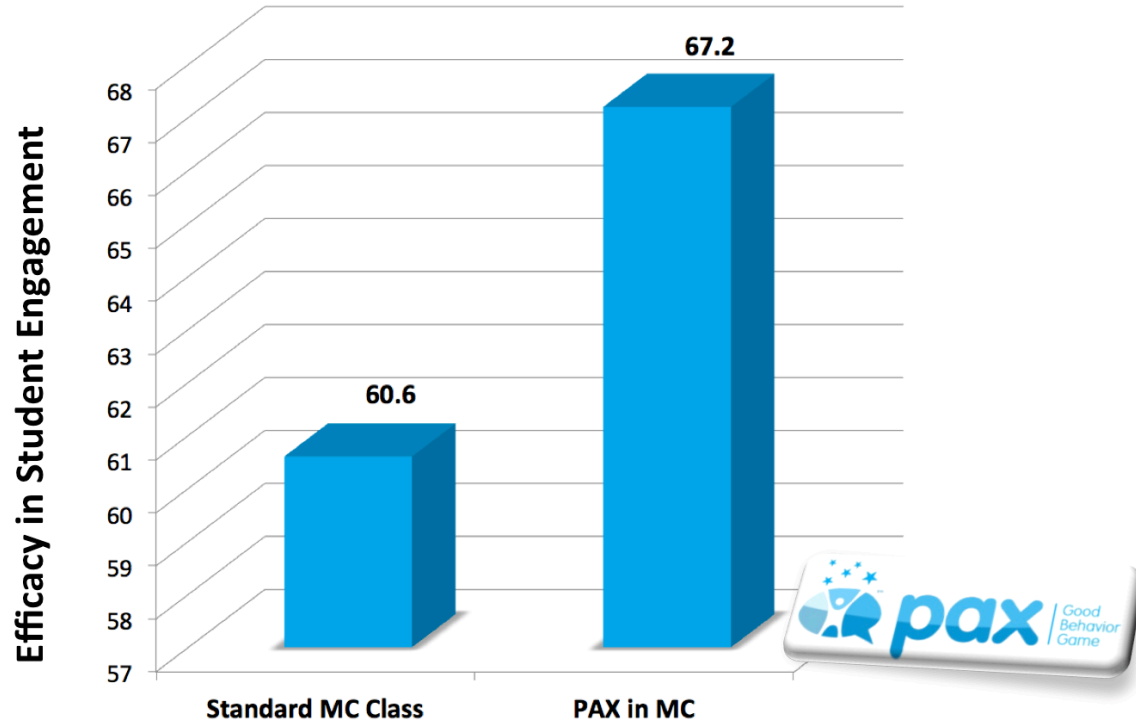
Statistically significant increase over control in instructional strategies


**Statistically Significant Growth After Independent Samples t-Test*

PAX in MCE at WSU



Standard vs. PAX Class in Middle Childhood



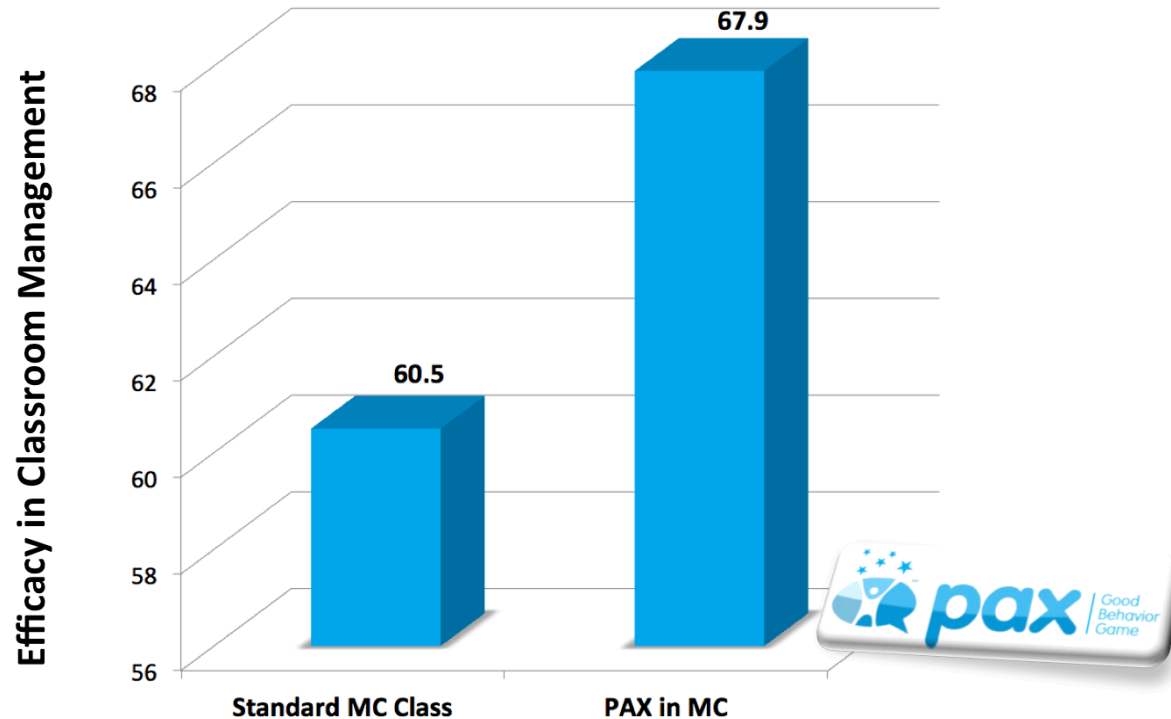
 Statistically significant increase over control in student engagement

**Statistically Significant Growth After Independent Samples t-Test*

PAX in MCE at WSU



Standard vs. PAX Class in Middle Childhood



Statistically significant increase over control in classroom management

**Statistically Significant Growth After Independent Samples t-Test*

Background

This study examines the effect of providing universal preventive intervention training with the PAX Good Behavior Game on the sense of efficacy of pre-service middle childhood teacher candidates when delivered as a part of their teacher education program. Numerous longitudinal studies have outlined the proximal and distal outcomes of PAX GBG on students. PAX GBG has also shown to increase the sense of efficacy in pre-service and in-service early childhood teachers.



PAX GBG and Efficacy

In previous studies, PAX GBG has shown to increase teachers' sense of efficacy. Whether delivered as a part of a pre-service teacher education program or in-service teacher professional development, PAX GBG training includes classroom management, social/emotional, and group dynamics skill modeling. This experience caused an overall increase in many target areas including:

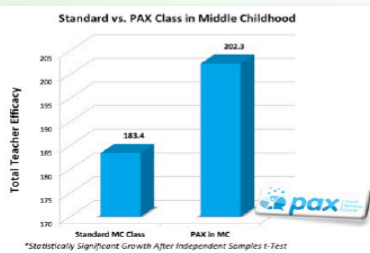
- Overall Teacher Self Efficacy
- Student Engagement
- Instructional Strategies
- Classroom Management

Methods

The 31 participants in this study were members of a four-year undergraduate middle childhood education program. This program requires a classroom management course as a part of the undergraduate educational study for pre-service teacher candidates.

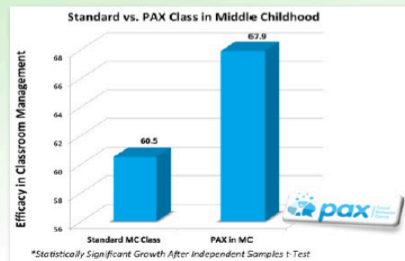
One section for this course requirement was selected to receive PAX GBG universal prevention training as a part of the classroom management course requirement. Minor modifications were made to the trauma-informed prevention strategies and delivery of PAX GBG to make it appropriate and useful for application in the 4th through 9th grades for middle childhood teacher candidates. The Teacher's Sense of Efficacy Scale, a 24 item questionnaire, was used to assess and compare teacher candidate performance.

Results



Results

Paired t-tests showed that teacher candidates in the PAX GBG group scored significantly higher on overall TSE (202.3 vs. 165.0) as well as on the three subscales: Instructional strategies (67.2 vs. 54.8), student engagement (67.2 vs. 56.3) and classroom management (67.9 vs. 54.8) at the conclusion of the course compared to before the course.



Independent t-tests showed that PAX GBG candidates demonstrated a significantly higher sense of efficacy after the course than those without training in overall efficacy (202.3 vs. 183.4) as well as on the three subtests: Instructional strategies (62.3 vs. 67.2), student engagement (60.6 vs. 67.2) and classroom management (60.5 vs. 67.9).

Conclusions



The extended exposure to evidence-based principles along with experiences with PAX GBG in the field, student-directed literature reviews, group research projects, and in-class and online instruction allowed teacher candidates tremendous depth to their study and understanding of prevention, self-regulation, and behavior. Teacher candidates report higher levels of efficacy after participating in PAX GBG instructional courses, and are more ready to enter the field as effective and professional educators.



www.WrightOFER.com

PAX for Pre-Service Teachers at Wright State University

"I have fallen in love with the idea of PAX as a way to manage the classroom. PAX and the structure of ECE 3400 allowed me to become a better teacher by giving me more tools in my toolbox." - Samantha Baker

"Not only does it create a nurturing environment for all students, but it makes class time fun! PAX Good Behavior Game has given me faith in my ability as a future teacher." - Kacie Carney

"Not only is it beneficial for the students, but it also benefits the teachers. Who doesn't want to be that awesome teacher all the students wish they had? PAX allows me to be that teacher by engaging my students in learning but also having fun!" - Kristin Burns



(L-R) Samantha Baker, Kacie Carney, Kristin Burns. Spring 2014 PAX Pre-service cohort members.

The PAX Game



The Four Classroom Miracles

- Learning to read
- Learning to write
- Learning to do math

- Learning
- self-regulation,
- self-control, and
- self-management





Most teachers learned how to create these from teacher education and professional development.

This is what teachers learn to teach with PAX GBG.

The Evidence-based approach to behavior

The PAX Game



Criteria	Phonics	
Research base for 85% + success rate	✓	✓
Improves student outcomes regardless of language, culture, or background	✓	✓
Having skillset increases teacher efficacy, satisfaction, retention	✓	✓
Parent support improves results but NOT mandatory	✓	✓
Adopted as the universal approach to the content	✓	

Please
learn
PAX.

Are you a
PAXleader?
We are
PAXleaders!



By age 21, PAX students show:



50% drop in drug dependence



68% drop in tobacco use



35% drop in alcohol dependence



32% drop in criminal behavior



50% drop in suicide ideation

Visit: GoodBehaviorGame.org today!

Dr. Jason Fruth, Wright State University



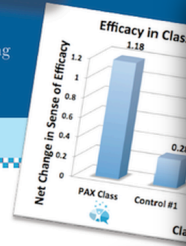
at Wright State University

The ONLY Accredited
PAX Pre-service Teacher Training
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If a teacher spends an entire
30-year career using PAX...

- 66 More girls will graduate from high school
- 49 More boys will enter college
- 7 Fewer boys will be convicted of violent crimes
- 72 Fewer boys will develop serious drug addictions
- 49 Fewer boys will become



What does PAX/GBG

do for future tea

The PAX Good Behavior Ga
teaching strategies with prove
randomized control trials wit
of their impact on the lives of

Jason Fruth: The Tootle trainer

By Rob Treyner

tivity.
"PAX is the thing and the
feeling we all need more of,"
Fruth said.

"That feeling you get when
you watch those YouTube
videos of soldiers returning
home to surprise their fam-
ily — that's the kin
we need more of in
and in our workpl
said.

Community
mary components
"Tootles." Tootles

